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ABSTRACT

This paper reports on a study which was designed to teach language skills and concepts to kindergarten children who had entered school with serious language deficiencies. The study's objectives were to: (1) provide the opportunity for interaction between child and adult; (2) encourage the development of concepts through concrete experiences, dialogue, and reflective thinking; (3) assist children in adapting their language to the language of the classroom through the use of trade books; (4) encourage self-motivated learning through positive successful daily learning experiences. Kindergarten students in two high-risk schools in Lake Charles, Louisiana were tested using the Boehn Test of Basic Concepts. The 18 students who made the lowest scores on the test were randomly assigned to a control or experimental group. Experimental group members received treatment in groups of 3 for 30 minutes each day. Treatment consisted of concept, language, and cognitive development activities designed to meet program objectives. Results indicated that the intervention treatment of 1 adult working with small groups of at-risk students every day for 30 minutes was successful in raising the children's understanding of the 50 basic concepts tested in the program. (RJC)

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A PAPER PRESENTED TO: THE AMERICAN READING FORUM
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Research to Impact Practitioners: Teaching Concepts to At-Risk Children

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Running head: TEACHING CONCEPTS TO AT-RISK CHILDREN

Research to Impact Practitioners: Teaching Concepts to At-Risk Children

Early childhood educators have long been concerned with the issue of teaching language skills to young children who lack language and concepts. These children are usually unable to meet the expectations of the public school system, and eventually drop out of school. Research indicates a high correlation between these at-risk students and minority group affiliation.

Local administrators and teachers were included in a research effort conducted in Lake Charles, Louisiana with at-risk kindergarten children. School administrators and principals were involved in the decision to conduct the study in two schools considered to be high-risk in the parish. Kindergarten teachers received a handbook explaining details of the study with a synopsis of research findings calling for early intervention with at-risk children. With their cooperation, a study was begun in which language skills and concepts were taught to children who had entered school with a serious deficiency in these areas. Such children are usually unable to meet the expectations of the public schools, and eventuallly drop out

of school. Louisiana's drop-out rate is one of the highest in the nation.

Theoretical Framework

Low-achieving readers are often labeled as "language disabled" or "problem readers", implying that something is amiss within the child. Wilson (1985) maintains that in most cases of low achievement in reading, the problem is not within the reader, but is encountered by the reader. It is the responsibility of the teacher to help the reader overcome the problem.

A conflict often arises between the child's need for consistent and personal support needed to overcome reading problems and the demands imposed by school systems which build in failure for many children. Some of the problems encountered by at-risk students are: a) discrimination because of race, social status or any other perceived difference that can cause children to feel they are failures; b) instruction and materials which are inappropriate; and c) humiliation felt by children who are grouped and labeled in ways that promote low self-esteem. Many of these problems tend to stifle motivation and to intensify the cycle of failure in at-risk children.

Conscientious teachers attempting to meet the needs of these children often run into frustrating demands imposed by the school system. Overcrowded classrooms; pressures exerted by accountability; an unfavorable press; non-teaching duties; a lack of time to prepare; and materials which are inappropriate all contribute to an inability to meet the needs of at-risk students. The teacher knows in many cases what should be done, but because of varied demands, is often unable to meet the needs of the child who seems destined by his lack of language development and lack of conceptual development to fail.

Research on at-risk students has focused mainly on two approaches to intervention which seek to facilitate school performance. The first of these is intervention in the home, which has centered on bringing about change in mother-child interactions during the preschool years. The second approach centers on intervention in a school situation, either at the preschool level or during early elementary years. Joan Tough (1982) conducted a longitudinal research study of young children from different social-class groups in England. Her findings suggested that programs devoted to building vocabulary, practicing syntactic

structures, and using locational prepositions were too limited in scope. She found that the main problem of these at-risk children was not that they generally lacked language (which they did), but that their expectations about using language did not support learning. Her findings suggested that intervention programs should not only be concerned with helping children to become literate, but should also be concerned with developing personal qualities, fostering skills of communication, and generating the ability to think and reflect on experiences. The development and use of language should be the means for the at-risk child to develop self-motivated learning and this should be accomplished through the use of language in talking with others (Tough, 1982).

Dale Farran (1982) reported on a longitudinal study in the United States on mother-child interaction patterns during the preschool years. She found that many factors play a role in contributing to the school problems of at-risk children - environment, ethnicity, the dominant culture, and the schools themselves. She found that the place for intervention to facilitate school performance for at-risk children was not in families, but in schools

(Farran, 1982). Research was conducted by Catherine Snow (1982) on social class differences in mother's speech. Her findings suggest that interactions with children while book reading provided the opportunity for novel, complex, and creative use of language. Lynne Feagans (1982) studied social class differences in children as they relate to school performance. She found that many intervention programs focused on language skills which were not reinforced in the school.

Description of the Study

Based on prior research, this study was designed to achieve the following objectives: 1) to provide the opportunity for interaction between child and adult; 2) to encourage the development of concepts through concrete experiences, dialogue, and reflective thinking; 3) to assist children in adapting their language to the language of the classroom through the use of trade books to learn about framework, sequence of events, and new experiences; 4) to enourage self-motivated learning through positive, successful learning experiences each day.

Sample Description and Design

Kindergarten students in two high-risk schools in the local parish were tested in September, 1987, using Form C of The Boehm Test of Basic Concepts (The Psychological Corporation, 1986). Eighteen students in each of the four classes making the lowest scores on the test were assigned randomly to either the experimental or the control group. Experimental group members received treatment in groups of three for thirty minutes each day. Control group members received no special treatment. A paid program supervisor was in attendance at each school every day to maintain the continuity of the program - setting out materials, collecting the children, making certain volunteer tutors were in place, and substituting for them if necessary. Treatment was administered by trained volunteer tutors. These were adult volunteers from the community who agreed to give one hour on a specific day each week to the program. Treatment consisted of concept, language, and cognitive development activities designed to meet the program objectives. Training for volunteer tutors was conducted by the reseachers.

Members of experimental and control groups were posttested during the first week in May, 1988, using Form D of The Boehm Test of Basic Concepts (The Psychological Corporation, 1986). Forms C and D are parallel forms and test the same 50 concepts.

Results of the Study

Tests were scored and results recorded. Statistical procedures were applied to these results. In testing the hypothesis that the experimental group would show more increase in scores on the posttest than the control group, a t-test for significant differences was used. First entering pre-test scores for each group were tested. Variance was found to be homogeneous. No significant difference in entering pre-test scores of the experimental and control groups were found at the .05 level using the pooled variance formula for finding t (Table 1).

Insert Table 1 about here

The variance of the difference scores of the experimental and control groups was tested. Variance was

found to be homogeneous. The pooled variance formula was used to test for differences. A significant difference at the .05 level in the difference scores in favor of the experimental group was found (Table 2).

Insert Table 2 about here

A t-test was run on the experimental and control group difference scores by schools. A significant difference at the .05 level was found in the difference scores in favor of the experimental groups at each of the two schools (Table 3).

Insert Table 3 about here

Discussion

Results indicate that the intervention treatment of one adult working with small groups of at-risk kindergarten students every day for 30 minutes is successful in raising these children's understanding of the 50 basic concepts tested in the program. Part of the treatment focused on

language and cognitive development (building vocabulary, story structure, developing predictive and problem-solving skills) which was not measured by the posttest. The results of this portion of the treatment will be decided by the performance of these students in their first grade reading experience. Reading achievement scores for experimental and control group members will be compared in May, 1989.

Results of this study, along with the strategies employed in the intervention treatment, will be reported to in-service kindergarten teachers through scheduled workshops and inservice presentations. Presentations of findings also will be made to instructors of pre-service teachers.

Implication for Classroom Instruction

Replication of the treatment for this program is feasible in every kindergarten classroom using parents or other volunteers. Treatment is not difficult - it only requires a concern for children and the ability to read aloud. These at-risk children are our future dropouts, as well as our future hope. It is imperative that we invest both time and energy at this level to increase their chances for success in life.

References

Farran, D.C. (1982). Mother-child interaction, language development and school performance of poverty children. In L. Feagans, and D.C. Farran (Eds.), The Language of Children Reared in Poverty. New York: Academic Press.

Feagans, L. (1982). The development and importance of narratives for school adaptation. In L. Feagans, and D. C. Farran (Eds.), The Language of Children Reared in Poverty. New York: Academic Press.

Skinner, B. F. (1957). Verbal Behavior. New York: Appleton-Century-Crofts.

Snow, C. E., Dubber. C., and DeBlauw, A. (1982). Routines in mother-child interaction. In L. Feagans, and D. C. Farran (Eds.), The Language of Children reared in Poverty.New York: Academic Press.

The Psychological Corporation. (1986). Boehm Test of Basic Concepts. New York: Harcourt Brace Janovitch, Inc.

Tough, J. (1982). Language, poverty, and disadvantage in school. In L. Feagans, and D. C. Farran (Eds.), The Language of Children Reared in Poverty. New York: Academic Press.

Vygotsky, L. S. (1962). Thought and Language, edited by

E. Haufman and G. Vaker. Cambridge: The MIT Press.

Wilson, R. M. and Cleland, C. J. (1985). Diagnostic and Remedial Reading for Classroom and Clinic. Columbus: Charles Merill Publishing Co.

Table 1

Pretest Scores of Students in Experimental (1) and Control (2) Groups

N_1	N_2	X_1	X_2	s_1	s_2	F	t
28	31	17	20	7.564	5.842	1.295	.227

* $p<.05$.

Table 2

Difference Scores Experimental (1) and Control (2) Groups

N_1	N_2	$\bar{X}_1$	$\bar{X}_2$	s_1	s_2	F	t
28	31	20	17	7.316	5.472	1.337	1.796*

* $p<.05$.

Table 3

Difference Scores by Schools S(1) S(2) for Experimental (1) and Control (2) Groups

	N_1	N_2	X_1	X_2	s_1	s_2	t
S_1	12	17	21.1	17.2	7.1	5.1	1.707*
S_2	16	14	19.2	16.7	7.5	5.2	.964*

* $p<.05$.